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(54) Title: A LEAK DETECTOR COMPRISING A SELF-HEATED THERMISTOR CONTROL CIRCUIT

(57) Abstract: A system for detecting leaks includes a sensing circuit (10) including a first thermistor device (12a) adapted to detect a leak upon contact with a liquid, and a second thermistor device (12b) functioning as a reference device. The first and second thermistor devices (12a, 12b) are driven with a current such that both thermistor devices operate in a self-heated mode at a temperature above an ambient temperature. A control system controls a drive circuit for maintaining a constant application of power through both thermistor devices in response to a voltage monitored at a reference point in the sensing circuit including the reference thermistor device. The voltage at the reference point in a portion of the sensing circuit including the first thermistor device, is additionally monitored and compared with the voltage at the reference point on the sensing circuit (10) including the second thermistor device. A leak condition is determined on the basis of a comparison result of the ambient temperature.